UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

182

DATE: March 16, 1992

SUBJECT: Review of Draft Ecological Risk Assessment
American Chemical Services (ACS) NPL Site, Indiana

FROM: Eileen H. Helmer, Ecologist
Technical Support Section

TO: Wayde Hartwick, RPM
IL/IN Branch

I reviewed the above mentioned document and made recommendations to Terry Klemp of Westion, Inc. for the final version. My most important comment to her was that the assessment should summarize the locations of samples which contributed most to risks calculated for the site. In addition, as you requested, below are general recommendations for what should be included in the feasibility study (FS) for the above mentioned site.

General comment - As you can see, a desk-top ecological risk assessment can conclude that everything needs to get cleaned up, even a wetland that appears to be providing fish and wildlife habitat. That is why field investigations are so important at sites like ACS, where an area providing habitat is also contaminated.

In addition to the hydrological monitoring which I previously recommended (see memo dated December 13, 1991), the FS should contain investigations of potential ecological impacts from contaminants. If impacts are found to be potentially low, physical disturbance of the wetland through dredging, bulldozing, etc. may not be warranted.

To investigate impacts, the following will be necessary:

- wetland surface water and sediment samples
- surface water and sediment toxicity testing
- collection of fish or caged fish for tissue analysis (exposure to mink or other fish eating predator)
- collection of small mammals (exposure to mink and raptor)

One of the reasons the desk top assessment was performed conservatively is that no surface water or sediment samples from the wetland itseld were available. Preliminary sampling limited to chemical analyses should be conducted to determine the degree of contamination in wetland habitats. Preliminary toxicity testing could also be conducted.

The investigation plan to determine whether small mammals are accumulating contaminants may be necessary if wetland sediments are significantly contaminated. Note, however, that biological sampling must also be accompanied by chemical analyses. A sampling plan should be developed which takes all of the above factors into consideration.

Because risks were considered elevated for a variety of contaminants, including both organic, including volatile and semi-volatile, and inorganic contaminants, sediment and surface water samples should be analyzed for priority pollutants.

If you have any questions or need any additional information, please give me a call at 6-4828. Also, please take the time to complete the attached critique sheet and return it to Steve Ostrodka at HSRLT-5J.

cc: Steve Ostrodka, TSS